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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,571	01/27/2004	Alain Gauthier	713-1029	9023

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EXAMINER

REESE, DAVID C

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/764,571

Applicant(s)

GAUTHIER, ALAIN

Examiner

David C. Reese

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This office action is in response to Applicant's amendment filed 7/25/2005.

Status of Claims

- [1] Claims 1-6, 8-20 are pending.

Drawings

- [2] The drawing(s) were previously objected for informalities. In view of Applicant's replacement drawing(s) submitted on 7/25/2005, and amendment to the specification, all previous objection(s) to the drawings have been withdrawn. Accordingly, the changes have been entered.

Claim Rejections - 35 USC § 112

- [3] Applicant has addressed all rejections under 35 USC § 112 to the Claims in the amendment filed 4/25/2005. Accordingly, the Examiner has withdrawn the 35 USC § 112 rejections.

Claim Rejections - 35 USC § 103

- [4] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- [5] Claims 1, 3-4, 6, 8-14, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over West et al. US-6,354,779, in view of Hinch, US-5,980,169.

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Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for Claim 1, West et al. teaches of a anchor for friable material, said anchor comprising

- a roughly cylindrical body (222 in Fig. 7B)

- a drilling portion (below 204 in Fig. 7B) provided, at a free end of the body, with drilling teeth (three teeth below 204 in Fig. 7B),

- a bearing flange (212 in Fig. 7B) at the other end of the body;

- and an external screw thread (threads between 222 in Fig. 7B) wound around the body (222 in Fig. 7B) in one direction;

the drilling portion (below 204 in Fig. 7B) being configured as a portion of a drill bit, wherein the drill bit portion (below 204 in Fig. 7B) has two helical flutes (204 on the right, and the other on the upper left in Fig. 7B) in the same direction as the external screw thread (between 222 in Fig. 7B), each of said flutes opening onto a flat surface (below 204 on the right, and the other on the left in Fig. 7B) forming the wall of one of two lateral drilling teeth (below and to the right of 204).

The difference between the claim and West et al. is the claim recites: that the flat surface of the flute forms the wall of a central drilling tooth. Hinch discloses a drilling portion similar to that of West et al. In addition, Hinch further teaches of each of said flutes (22) opening onto a

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flat surface (28) forming the wall of a central drilling tooth (24) and of one of two lateral drilling teeth (38). It would have been obvious to one of ordinary skill in the art, having the disclosures of West et al. and Hinch before him at the time the invention was made, to modify the drilling portion of West et al. to have the flat surface of the flute opening form the wall of a central drilling tooth as in Hinch. One would have been motivated to make such a combination because such a configuration of the drilling portion allows a more concrete engagement of a work piece and thereby allowing a more efficient drilling event.

Re: Claim 3, West et al. teaches of a body that is hollow and pierced with a bore (114 in Fig. 3).

Re: Claim 4, Hinch discloses wherein said drilling portion further comprises two drill bit ribs (23) bordering said flutes (22), each of said ribs forming one of said lateral drilling teeth (38).

Re: Claim 6, West et al. teaches of a body that is hollow and pierced with a bore (114 in Fig. 3).

As for Claim 8, West et al. teaches of an anchor for friable material, said anchor comprising

- a shank (203);

- a head (212) formed at an upper end of said shank;

- a drilling portion (204) formed at a lower end of said shank; and

- a plurality of external threads (threads between 222 in Fig. 7B) which helically coil about said shank between said head (212) and said drilling portion (204);

- wherein said drilling portion (204) comprises

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two helical flutes (204 on the right, and the other on the upper left in Fig. 7B) in the same direction as the external threads (threads between 222 in Fig. 7B),

The difference between the claim and West et al. is the claim recites: of a central drilling tooth having opposing flat surfaces; and each of said flutes ending at one of said flat surfaces of said central drilling tooth and that said drilling portion further comprises two lateral drilling teeth on opposite sides of said central drilling tooth, each of said lateral drilling teeth having a flat surface being an extension of one of the flat surfaces of said central drilling tooth.

Hinch discloses a drilling portion similar to that of West et al. In addition, Hinch further teaches of each of said flutes (22) opening onto a flat surface (28) forming the wall of a central drilling tooth (24) and of one of two lateral drilling teeth (38). Further, Hinch discloses wherein said drilling portion further comprises two lateral drilling teeth (38) on opposite sides of said central drilling tooth (24), each of said lateral drilling teeth (38) having a flat surface being an extension of one of the flat surfaces of said central drilling tooth (the right lateral tooth 38 in Fig. 2 is formed from the flat surface extension from a flute that also supplies that of the central drilling tooth 24).

It would have been obvious to one of ordinary skill in the art, having the disclosures of West et al. and Hinch before him at the time the invention was made, to modify the drilling portion of West et al. to have the flat surface of the flute opening form the wall of a central drilling tooth as in Hinch. One would have been motivated to make such a combination because such a configuration of the drilling portion allows a more concrete engagement of a work piece and thereby allowing a more efficient drilling event.

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Re: Claim 9, Hinch discloses wherein said drilling portion further comprises two drill bit ribs (23) bordering said flutes (22), each of said ribs (23) forming one of said lateral drilling teeth (38).

Re: Claim 10, Hinch further teaches of a flat surface (before 24 in Fig. 2) of the central drilling tooth (24) extends laterally (to the bottom right in Fig. 2) to define the flat surface of only one of said lateral drilling teeth (38 on the right side of the center drilling tooth), and the rib (30) that forms the other of said lateral drilling teeth (38 on the left side of the center drilling tooth) defines a raised border of said central drilling tooth (24) on said flat surface.

Re: Claim 11, Hinch further teaches wherein each of said flat surfaces of the central drilling tooth extends laterally to define the flat surface of only one of said lateral drilling teeth (the right lateral tooth 38 in Fig. 2 is formed from the flat surface extension from a flute that only supplies that of the central drilling tooth 24).

Re: Claim 12, Hinch further teaches wherein each of said flat surfaces of the central drilling tooth (24) extends downwardly to an pointed end of said central drilling tooth (26) which pointed end is a lowermost point of said anchor.

Re: Claim 13, Hinch further teaches wherein each of said flutes (22) ends abruptly at the respective flat surface of the central drilling tooth (right before 24).

Re: Claim 14, where said flat surfaces of the central drilling tooth define four cutting edges (40, 26, 36).

Re: Claim 16, West et al. teaches of a shank that is hollow and pierced with a bore (114 in Fig. 3).

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As for Claim 17, West et al. teaches of a anchor for friable material, said anchor comprising

a shank (203);

a head (212) formed at an upper end of said shank;

a drilling portion (204) formed at a lower end of said shank; and

a plurality of external threads (threads between 222 in Fig. 7B) which helically coil about said shank between said head (212) and said drilling portion (204);

wherein said drilling portion (204) comprises

two helical flutes (204 on the right, and the other on the upper left in Fig. 7B) in the same direction as the external threads (threads between 222 in Fig. 7B),

The difference between the claim and West et al. is the claim recites: of a central drilling tooth having opposing flat surfaces; and each of said flutes ending at one of said flat surfaces of said central drilling tooth and that said drilling portion further comprises two lateral drilling teeth on opposite sides of said central drilling tooth, each of said lateral drilling teeth having a flat surface being an extension of one of the flat surfaces of said central drilling tooth.

Hinch discloses a drilling portion similar to that of West et al. In addition, Hinch further teaches of each of said flutes (22) opening onto a flat surface (28) forming the wall of a central drilling tooth (24) and of one of two lateral drilling teeth (38). Further, Hinch discloses wherein said drilling portion further comprises two lateral drilling teeth (38) on opposite sides of said central drilling tooth (24), each of said lateral drilling teeth (38) having a flat surface being an extension of one of the flat surfaces of said central drilling tooth (the right lateral tooth 38 in Fig.

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2 is formed from the flat surface extension from a flute that also supplies that of the central drilling tooth 24).

It would have been obvious to one of ordinary skill in the art, having the disclosures of West et al. and Hinch before him at the time the invention was made, to modify the drilling portion of West et al. to have the flat surface of the flute opening form the wall of a central drilling tooth as in Hinch. One would have been motivated to make such a combination because such a configuration of the drilling portion allows a more concrete engagement of a work piece and thereby allowing a more efficient drilling event.

Re: Claim 18, Hinch discloses wherein each of said flat surfaces of the central drilling tooth (above 24) extends downwardly to an pointed end of said central drilling tooth (24) which pointed end is a lowermost point of said anchor (26).

Re: Claim 19, Hinch discloses wherein each of said flutes (22) ends abruptly at the respective flat surface of the central drilling tooth (right before 24).

Re: Claim 20, where said flat surfaces of the central drilling tooth define four cutting edges (40, 26, 36).

[6] Claims 2, 5, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over West et al. US-6,354,779, in view of Hinch US-5,980,169, and further in view of Carlson et al, US 4,157,674.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to

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a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for Claims 2, 5, and 15, West et al. in view of Hinch teaches of claims 1, 3-4, 6-9, and 17-19

The difference between the claims and West et al. in view of Hinch is the claim recites: that the self-drilling anchor possesses a threaded shank portion that extends beyond its flange. Carlson et al. discloses a threaded fastener similar to that of West et al. in view of Hinch. In addition, Carlson et al. further teaches of a threaded shank, a flange, and a threaded shank portion that extends beyond its flange. It would have been obvious to one of ordinary skill in the art, having the disclosures of West et al. in view of Hinch and Carlson et al. before him at the time the invention was made, to modify the flange of West et al. in view of Hinch to include a threaded shank portion beyond its flange, as in Carlson et al. One would have been motivated to make such a combination because it allows "a second thread adapted to threadingly engage a nut or other threaded member..." as taught by Carlson et al, in part 1, line 17.

West et al. teaches of the above claims.

Response to Arguments

[7] First and foremost, in response to applicants' traversal of the finality of the office action; the applicant is correct since a new grounds of rejection was issued against Claim 1, as Claim 1 was not amended to the degree in which such a finality should have been warranted. In the instant case, however, since the rejection West in view of Hinch is maintained on all claims, including newly amended claims, this office action is therefore final.

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[8] Applicant's arguments filed 7/25/2005 regarding rejections under 35 U.S.C. 103 have been fully considered but they are not persuasive. Applicant begins the traversal by stating that the prior art of West in view of Hinch; especially Hinch, clearly fails to teach or suggest "a flat surface forming the wall of a central drilling tooth and of one of two lateral drilling teeth" from claim 1, as well as the following from claim 8, "each of said lateral drilling teeth having a flat surface being an extension of one of the flat surfaces of said central drilling tooth".

Examiner maintains that that shown by Hinch is still anticipatory toward the traversed claim language. To begin, claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974). With such in mind, one will find that the structure as presented by Hinch does indeed anticipate said claim language. As stated by both the applicant and Hinch, "36 and 38 are substantially planar." It is also stated by Hinch that the "faces 36 and 38 meet at point 40 of the V-shaped notch 34." True, though a angle may be provided between the faces, preferred embodiment of which, stated by Hinch, is of 60 degrees, this still reads upon the statement, "flat surface forming the wall of a central drilling tooth and of one of two lateral drilling teeth." Both 36 and 38 possess flat surfaces, are planar, and adjacent to one another forming, in nature, the wall, the structure of which is supplied by the flute above, of the central drilling tooth and one of two lateral drilling teeth. The same reasoning can be applied to that from previous claim 8, wherein, "each of said lateral drilling teeth have a flat surface being an extension of one of the flat surfaces of said central drilling tooth." 38 in its most broad and reasonable interpretation can and is considered an extension of the flat surface 35, as they once again possess flat surfaces, are planar and adjacent to one another, and both stem from the familiar flute. Lastly, applicant states that surfaces A and B in the attached exhibit

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are not described in the text of the Hinch patent as being planar. Examiner would like to direct applicant to col. 3, lines 8 and 9, "faces 36 (A) and 38 (B) are substantially planar."

Conclusion

[9] THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

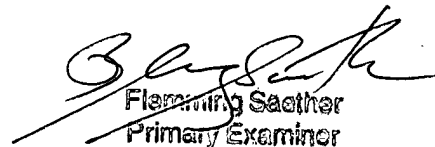
[10] Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Reese whose telephone number is (571) 272- 7082. The examiner can normally be reached on 7:30 am - 6:00 pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached at (571) 272-7075. **Please also note the change in the fax phone number to (571) 273-8300 for the organization where this application or proceeding is assigned.**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sincerely,
David Reese
Assistant Examiner
Art Unit 3677

DCR


Flemming Sæther
Primary Examiner

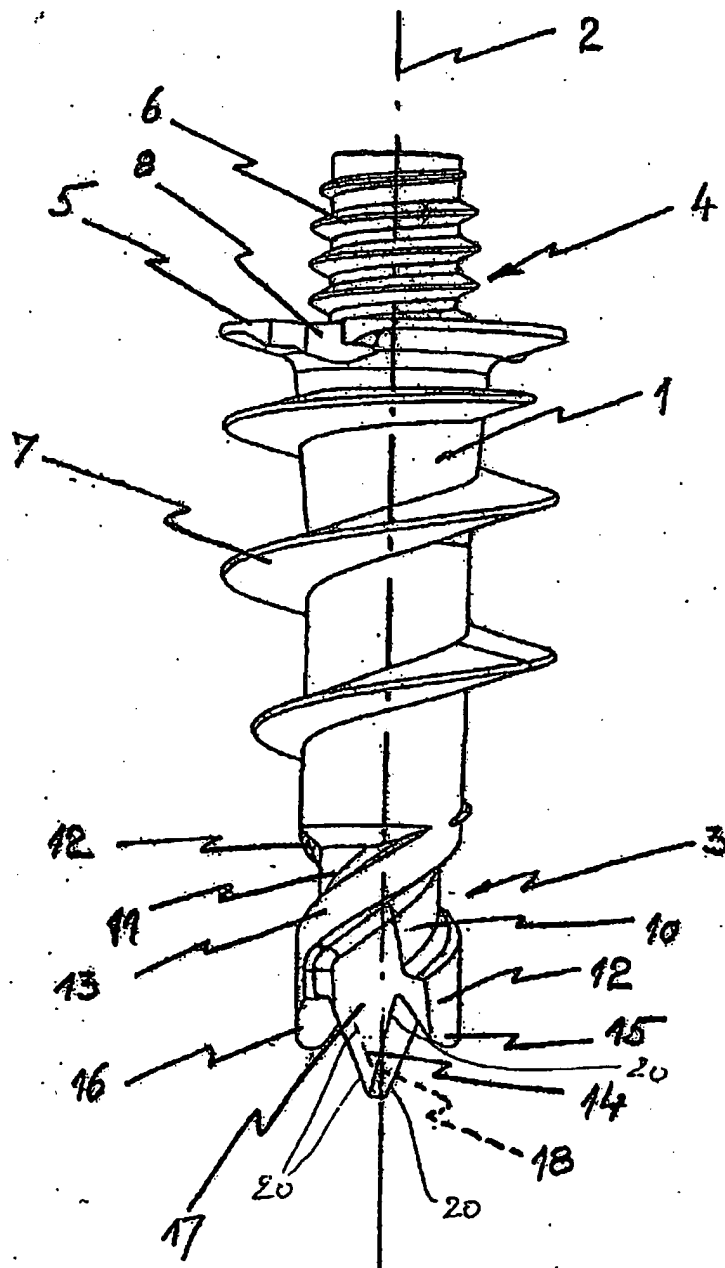
SCREW ANCHOR FOR FRIABLE MATERIAL

Application No. 10/764,571

Inventor: Alain GAUTHIER

Replacement Sheet

1/1



To Be Entered (S)